II. AMENDMENTS TO THE SPECIFICATION

Page 1, amend the section at line 3-19 as follows:

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority under 35 U.S.C. § 119(e) to U.S. Provisional Patent Application Number 60/468,899 Variable Speed Wind Turbine Technology, which was filed on May 7, 2003 and which is incorporated herein by reference.

This application is related to US Patent 6,304,002; US Patent 6,731,017; ~~Application number 10/213,764 of Amir S. Mikhail and Edwin C. Hahlbeck entitled "Improved Distributed Power Train That Increases Electric Power Generator Density" filed August 7, 2002,~~ US Patent 6,653,744; ~~Application Number 09/920,247 of Peter Stricker, entitled "Distributed Generation Drivetrain (DGD) Controller For Application To Wind Turbine and Ocean Current Turbine Generators" filed July 31, 2001~~ ; US Patent Application Number 10/426,287 of Kevin L. Cousineau ; entiltled "Distributed Static VAR Compensation (DSVC) System For Wind And Water Turbine Applications" filed April 30, 2003, and US Patent Application number 10/449,342 of Amir S. Mikhail and Edwin C. Hahlbeck entitled "Improved Distributed Power Train (DGD) with Multiple Power Paths " filed May 31, 2003, all of which are assigned to Clipper Windpower Technology, Inc. and are incorporated herein by reference.

Page 5, amend the paragraph beginning at line 11 as follows:

The invention also allows for main-shaft damping without the use of a generator tachometer. Because ~~of the~~ synchronous generators are used with a passive rectifier, the main-shaft resonant frequency due to ~~the~~ blade inertia, compliant main-shaft inertia and bull gear inertia, can be sensed in the DC link voltage. The DC bus voltage is monitored and passed through a band pass filter which is tuned at the ~~mains haft~~ main-shaft resonant frequency, ~~this~~ The filtered signal can then be scaled and applied to the inverter system torque command and active damping is achieved.

Page 10, amend the paragraph beginning at line 1 as follows:

The preferred approach in the invention is to place the passive rectifier ~~uptower~~ up-tower and convert the synchronous generator AC voltage to DC. This results in a higher operating voltage on the pendant cables and a lower total quantity of cables as each generator/rectifier now has two conductors associated with it rather than three conductors each. The DC pendant cables are only possible because of the coordinated high impedance of the synchronous generator, which limits the DC fault current in the event of a ground or pendant cable fault. The GCU, which senses the DC bus voltage and current, senses ~~sense~~ this fault condition and brings ~~bring~~ the turbine to zero speed very quickly. While this takes a finite amount of time, the current does not build up as it would with a low impedance case and the shutdown is very controlled and orderly.

Page 12, amend the paragraph beginning at line 1 as follows:

FIGURE 5 is a representation of the role of the TCU 132. The TCU 132 takes sensor information such as turbine speed, blade pitch angle, tower acceleration (vibration), nacelle acceleration (nacelle vibration), wind speed,

wind direction, wind turbulence, nacelle position, AC line parameters, DC bus voltage, generator voltage, power output, ~~and~~ or other fault related sensors. The TCU 132 has control of the two principle actuators on the turbine; ~~:~~ the generators via the GCU 122, and the pitch system (PCU) 178. The TCU 132 performs a complicated, coordinated control function for both of these elements, and does so in a way, which maximizes the energy capture of the turbine while minimizing the machine's mechanical loads. A detailed description of this operation based on turbine operating regime is presented below. Finally, the TCU 132 also controls the yaw system 180, however, since this system responds very slowly to changing wind direction, the system operation is ~~straight-forward~~ straightforward and works to keep the turbine always pointed into the wind. The TCU 132 is also in communication with the turbine's SCADA system 179 in order to provide and receive sensor and status information.